



Docket No.: 13111-00002-US  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Burkhard Kröger et al.

Application No.: 10/525674

Confirmation No.: 3744

Filed: February 24, 2005

Art Unit: 1645

For: **METHOD FOR ZYMIC PRODUCTION  
OF FINE CHEMICALS CONTAINING  
SULPHUR (META)**

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Please note that the co-pending U.S. national stage applications referred to in the previously submitted Information Disclosure Statement have now received U.S. application serial numbers. Previously submitted PCT published application WO-2004/024931 corresponds to U.S. national stage application Serial No. 10/525,907 and PCT published application WO-2004/024933 corresponds to U.S. national stage application Serial No. 10/525,710.

Further note that PCT published application WO-2003/087386 enclosed herewith corresponds to U.S. national stage application Serial No. 10/511,302.

Of the documents listed on the attached SB/08 are the documents cited in the International Search Report during the prosecution of international application no. PCT/EP2003/009452, which corresponds to the above referenced application and which had not been previously submitted. In accordance with 37 CFR 1.97(b)(3), Applicants hereby submit these documents for the Examiner's consideration. A copy of each document required under 37 CFR 1.98(a)(2) is enclosed.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such. Moreover, Applicants understand the Examiner will make an independent evaluation of the cited documents.

Applicants believe no fee is due. However, if a fee is due, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 03-2775, under Order No. 13111-00002-US, from which the undersigned is authorized to draw.

Respectfully submitted,

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**INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

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of

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Application Number	10/525,674-Conf. #3744
Filing Date	February 24, 2005
First Named Inventor	Burkhard Kröger
Art Unit	1645
Examiner Name	Not Yet Assigned

Attorney Docket Number 13111-00002-US

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
AA*	US-2003/0170775-A1	09-11-2003	Pompejus, et al.		
AB*	US-4,601,893	07-22-1986	Cardinal		
AC*	US-5,175,108	12-29-1992	Bachmann et al.		
AD*	US-4,489,160	12-18-1984	Katsumata et al.		
AE*	US-5,158,891	10-27-1992	Takeda et al.		
AF*	US-5,965,391	10-12-1999	Reinscheid et al.		
AG*	US 10/511,302		Kröger et al.		

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
BA	EP-1108790-A2	06-20-2001	Kyowa Hakko Kogyo Co., Ltd.			
BB	WO-03/100072-A2	12-04-2003	BASF Aktiengesellschaft			
BC	WO-2003/087386-A3	10-23-2003	BASF Aktiengesellschaft		See US 10/511,302	
BD	WO-96/15246-A1	05-23-1996	Forschungszentrum Jülich GMBH		See US 5,965,391.	
BE	JP-10-229891-A	09-02-1998	Mitsubishi Rayon Co., Ltd.		See Abstract.	
BF	EP-0472869-A2	03-04-1992	Degussa AG		See US 5,175,108.	
BG	DE-10046870-A1	03-28-2002	BASF Aktiengesellschaft		See US- 2003/0170775 -A1.	

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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
CA	PATEK, M., ET AL., "Leucine Synthesis in <i>Corynebacterium glutamicum</i> : Enzyme Activities, Structure of <i>leuA</i> , and Effect of <i>leuA</i> Inactivation on Lysine Synthesis", Applied and Environmental Microbiology, Vol. 60, No. 1, 1994, pp. 133-140.		
CB	BOLIVAR, F., "Molecular Cloning Vectors Derived From The CoLE1 Type Plasmid pMB1", Life Sciences, Vol. 25, 1979, pp. 807-818.		
CC	VIEIRA, J., ET AL., "The pUC plasmids, an M13mp7-derived system for insertion mutagenesis and sequencing with synthetic universal primers", Gene, Vol. 19, 1982, pp. 259-268.		
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Substitute for form 1449A/B/PTO				<b>Complete If Known</b>	
				Application Number	10/525,674-Conf. #3744
				Filing Date	February 24, 2005
				First Named Inventor	Burkhard Kröger
				Art Unit	1645
				Examiner Name	Not Yet Assigned
Sheet	2	of	4	Attorney Docket Number	13111-00002-US

		Vol. 11, 1996, pp. 27-32.	
	CE	SANGER, F., ET AL., "DNA sequencing with chain-terminating inhibitors", Proc. Natl. Acad. Sci. USA, Vol. 74, No. 12, 1977, pp. 5463-5467.	
	CF	DUNICAN, L. K., ET AL., "High Frequency Transformation of Whole Cells of Amino Acid Producing Coryneform Bacteria Using High Voltage Electroporation", Biotechnology, Vol. 7, 1989, pp. 1067-1070.	
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	CH	SCHRUMPF, B., ET AL., "A Functionally Split Pathway for Lysine Synthesis in <i>Corynebacterium glutamicum</i> ", Journal of Bacteriology, Vol. 173, No. 14, 1991, pp. 4510-4516.	
	CI	O'REGAN, M., ET AL., "Cloning and nucleotide sequence of the phosphoenolpyruvate carboxylase-coding gene of <i>Corynebacterium glutamicum</i> ATCC13032", Gene, Vol. 77, 1989, pp. 237-251.	
	CJ	GRANT, S. G. N., ET AL., "Differential plasmid rescue from transgenic mouse DNAs into <i>Escherichia coli</i> methylation-restriction mutants", Proc. Natl. Acad. Sci. USA, Vol. 87, 1990, pp. 4645-4649.	
	CK	ITAKURA, K., ET AL., "Synthesis and Use of Synthetic Oligonucleotides", Ann. Rev. Biochem., Vol. 53, 1984, pp. 323-356.	
	CL	JENSEN, P. R., ET AL., "Artificial Promoters for Metabolic Optimization", Biotechnology and Bioengineering, Vol. 58, 1998, pp. 191-195.	
	CM	NARANG, S. A., "Tetrahedron Report Number 140 – DNA Synthesis", Tetrahedron, Vol. 39, No. 1, 1983, pp. 3-22.	
	CN	SONNEN, H., ET AL., "Characterization of pGA1, a new plasmid from <i>Corynebacterium glutamicum</i> LP-6", Gene, Vol. 107, 1991, pp. 69-74.	
	CO	BERNARD, P., ET AL., "The F Plasmid CcdB Protein Induces Efficient ATP-dependent DNA Cleavage by Gyrase", J. Mol. Biol., Vol. 234, 1993, pp. 534-541.	
	CP	SAHM, H., ET AL., "Pathway Analysis and Metabolic Engineering in <i>Corynebacterium glutamicum</i> ", Biol. Chem., Vol. 381, 2000, pp. 899-910.	
	CQ	ITAKURA, K., ET AL., "Expression in <i>Escherichia coli</i> of a Chemically Synthesized Gene for the Hormone Somatostatin", Science, Vol. 198, 1977, pp. 1056-1063.	
	CR	STADEN, R., "The current status and portability of our sequence handling software", Nucleic Acids Research, Vol. 14, No. 1, 1986, pp. 217-231.	
	CS	HOCHULI, E., ET AL., "Genetic Approach to Facilitate Purification of Recombinant Proteins With a Novel Metal Chelate Adsorbent", Biotechnology, Vol. 6, 1988, pp. 1321-1325.	
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	CX	MALUMBRES, M., ET AL., "Codon preference in Corynebacteria", Gene, Vol. 134, 1993, pp. 15-24.	
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Sheet	3	of	4	Attorney Docket Number	13111-00002-US

	CZ	BUTLER, B. A., "Sequence Analysis Using GCG", Methods of Biochemical Analysis, Vol. 39, 1998, pp. 74-97.	
	CA1	TAUCH, A., ET AL., "The Erythromycin Resistance Gene of the <i>Corynebacterium xerosis</i> R-plasmid pTP10 Also Carrying Chloramphenicol, Kanamycin, and Tetracycline Resistances is Capable of Transposition in <i>Corynebacterium glutamicum</i> ", Plasmid, Vol. 33, 1995, pp. 168-179.	
	CB1	LIEBL, W., ET AL., "High efficiency electroporation of intact <i>Corynebacterium glutamicum</i> cells", FEMS Microbiology Letters 65, 1989, pp. 299-304.	
	CC1	LENNOX, E. S., "Transduction of Linked Genetic Characters of the Host by Bacteriophage P1", Virology, Vol. 1, 1955, pp. 190-206.	
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	CJ1	MARCK, C., "DNA Strider": a 'C' program for the fast analysis of DNA and protein sequences on the Apple Macintosh family of computers", Nucleic Acids Research, Vol. 16, No. 5, 1988, pp. 1829-1836.	
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	CL1	WAHL, G. M., ET AL., "Cosmid vectors for rapid genomic walking, restriction mapping, and gene transfer", Proc. Natl. Acad. Sci. USA, Vol. 84, 1987, pp. 2160-2164.	
	CM1	EIKMANNS, B. J., ET AL., "Molecular Aspects of lysine, threonine, and isoleucine biosynthesis in <i>Corynebacterium glutamicum</i> ", Atonie van Leeuwenhoek, Vol. 64, 1993, pp. 145-163.	
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	CR1	SCHWARZER, A., ET AL., "Manipulation of <i>Corynebacterium glutamicum</i> by Gene Disruption and Replacement", Biotechnology, Vol. 9, 1991, pp. 84-87.	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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